



CLEAN COPY OF CLAIMS

1(Once amended). A device comprising:

a nanostructured anodic alumina substrate having two sides, wherein said anodic alumina substrate comprises substantially parallel nanoscale pores;

wherein each side of the alumina substrate has at least one deposited layer substantially perpendicular to the nanoscale pores; and

wherein at least one of said deposited layers comprises an electrode.

2(Once amended). The device of claim 1, wherein said device comprises a sensor.

6(Once amended). The device of claim 1, wherein said anodic alumina substrate comprises a sensing material inside the nanoscale pores.

11(Once amended). The device of claim 1, wherein said device further comprises a microheater.

12(Once amended). The device of claim 1, wherein said device further comprises an insulating layer.

17(Once amended). The device of claim 1, wherein the anodic alumina substrate has a thickness of 0.1 μm to 500 μm .

18(Once amended). The device of claim 1, wherein said nanoscale pores have a diameter of 1 nm to 500 nm

19(Once amended). The device of claim 1, wherein said nanoparticle pores

are substantially uniform in diameter.

29(as amended). The device of claim 1, wherein said layer has a

thickness in the range of 0.1 nm to 500 nm.

card layer has a
1/2 2nd layer
1st layer of monosaccharides

A5
27(Once amended). A method of making a device comprising the steps of:

forming an anodic alumina film on an aluminum substrate, wherein said anodic alumina substrate comprises substantially parallel nanoscale pores;

micromachining the anodic alumina film to obtain two surfaces by a technique selected from the group consisting of anisotropic etching and localized anodization; and

depositing at least one layer on each of the surfaces of the anodic alumina film; wherein at least one layer of the deposited layers is an electrode.

A6
29(Once amended). The method of claim 27, said method comprising the step of:

depositing another material in the nanoscale pores of the anodic alumina substrate.

38(New). The device of claim 1, wherein said device is a gas sensor.

A7
39(New). The device of claim 1, wherein the anodic alumina substrate is annealed.

40(New). The device of claim 1, wherein said device is a ceramic microdevice.

41(New). The device of claim 1, wherein said device is an array.

42(New). The device of claim 1, wherein said device is a photonic sensor.

43(New). The device of claim 1, wherein said device is an electromagnetic field sensor.

44(New). The device of claim 1, wherein said device is a biomedical sensor.

A
45(New). The device of claim 1, wherein said device is a bolometer.
46(New). The device of claim 1, wherein said device is a thermal sensor.
47(New). The device of claim 1, wherein said device is a magnetic sensor.
48(New). A device comprising:
 a nanostructured anodic alumina substrate, wherein said anodic
 alumina substrate comprises substantially parallel nanoscale pores and the
 device functions as a microheater.
